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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
HENN, TIMOTHY J	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/008,077	AAGAARD ET AL.	
	Examiner	Art Unit	
	Timothy J. Henn	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-44,46-48,50-53,55,56,58 and 79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-44,46-48,50-53,55,56,58 and 79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The indicated allowability of claims 1, 44 and 79 is withdrawn in view of the newly discovered reference(s) to Jain et al. (US 5,729,471), Morota et al. (US 6,919,921) and Rosenberg (US 6,128,006). Rejections based on the newly cited reference(s) follow.

Claim Objections

2. Claim 1 is objected to because of the following informalities: the limitation of "the wheel on a computer mouse" has insufficient antecedent basis. The limitation will be read as "a wheel on a computer mouse". Appropriate correction is required.

3. Claims 46, 47, 50, 51, 52, 55 and 58 are objected to because of the following informalities: These claims are dependent on canceled claims, for the purposes of art rejection the claims will be read as being dependent on claim 44. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4, 7, 8 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Morota et al. (US 6,919,921) in further

view of Rosenberg et al. (US 6,128,006).

[claim 1]

Regarding claim 1, Paff discloses a multiple camera video system comprising: a plurality of cameras (Figure 6, MASTER CAMERA 100 and SLAVE CAMERAS SD1-SD5); a master pan head for positioning a selected master camera from the plurality of cameras (Figure 6, Items 13-16); and a master broadcaster computer for calculating telemetry for at least one slave camera from the plurality of cameras (c. 4, ll. 6-49). Paff further discloses tilt adjustment (Figure 2, Item 11B and 14). The examiner notes that tilting the camera up or down would effectively change the height at which the camera field of view intersects a subject. However, Paff does not disclose a height intersect adjustment which is selected using a wheel on a computer mouse.

Morota discloses a system for camera tilt control in which a bar is dragged up and down to control camera tilt via a mouse (Figure 13; c. 7, ll. 38-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include tilt control as shown by Morota to allow easy tilt control of the cameras of Paff. However, while Paff in view of Morota discloses tilt (i.e. height intersect) control of the camera via mouse, the use of a mouse wheel is not disclosed.

Rosenberg discloses the use of a scroll wheel or mouse wheel to allow easy scrolling of elements on a graphical user interface (c. 1, l. 65 - c. 2, l. 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a scroll wheel on the mouse of Paff in view of Morota to easily tilt the camera by scrolling up or down on the graphical user interface disclosed by Morota.

[claim 2]

Regarding claim 2, Paff discloses a master pan head which is remote from the plurality of cameras (Figure 6).

[claim 4]

Regarding claim 4, Paff discloses a master pan head including a zoom adjustment (Figure 6, Item 16).

[claim 7]

Regarding claim 7, Paff discloses a plurality of robotic pan heads upon which each of the plurality of cameras is mounted for remotely controlling said plurality of cameras (Figure 6; c. 3, ll. 58-62).

[claim 8]

Regarding claim 8, Paff discloses robotic pan heads including a pan and tilt function (Figure 6, Items 13 and 14).

[claim 31]

Regarding claim 31, Paff discloses a communications medium coupling the plurality of cameras to the master broadcaster computer (Figure 6).

6. Claims 3, 9 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Morota et al. (US 6,919,921) in further view of Rosenberg et al. (US 6,128,006).

[claim 3]

Regarding claim 3, Paff lacks a master pan head including a monitor mounted thereon. Official Notice is taken that it is notoriously well known in the art to include electronic viewfinders or monitors on cameras to allow a local camera operator to verify the image which is being captured by the camera. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a monitor mounted on the master pan head to allow the option of operating the camera locally while being able to verify the image which is being captured by the camera.

[claim 9]

Regarding claim 9, Paff does not specifically disclose pan and tilt axes of the robotic pan heads which intersect at a point within the body of the plurality of cameras. Official Notice is taken that it is notoriously well known in the art to include pan and tilt axes of pan/tilt heads which intersect at a point within the body of the camera to allow independent control of pan and tilt functions of the cameras. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include pan and tilt axes which intersect at a point within the body of the slave cameras to allow independent control of the plurality of cameras.

[claim 37]

Regarding claim 37, Paff does not disclose a cam-A computer. Official Notice is taken that it is notoriously well known to include computers in video systems for easy video editing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a computer in the system of Paff to allow easy editing of the resulting video. The examiner notes that a "cam-A computer" is not

well known in the art nor is it described in the application to any degree which would define the term to require a specific structure. Therefore, any normal computer can be considered a "cam-A" computer for the purposes of art rejection.

7. Claims 10-16 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Morota et al. (US 6,919,921) in further view of Rosenberg et al. (US 6,128,006) in view of Heidmann et al. (US 6,057,833).

[claim 10]

Regarding claim 10, Paff in view of Morota in view of Rosenberg discloses a system connected to the master broadcaster computer which allows for control over camera functions (Figure 6, Item 11), but does not disclose a station which is a paint station. Heidmann discloses that the value of television broadcasts can be increased by incorporating graphics illustrations using digital painting applications. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a digital painting application in the station of Paff to make the station of Paff in view of Morota in view of Rosenberg a "paint station" which can increase the value of the broadcasts created by the master and slave cameras.

[claim 11]

Regarding claim 11, Paff in view of Morota in view of Rosenberg in view of Heidmann discloses a paint station including a monitor (Figure 16, Item 11A); an input device (Figure 16, Item 11B) and a paint station computer running paint station software

(Heidmann).

[claim 12]

Regarding claim 12, Paff in view of Morota in view of Rosenberg in view of Heidmann discloses a paint station which is capable of adjusting an attribute of at least one of the plurality of cameras (e.g. pan, tilt, zoom, generated video).

[claim 13]

Regarding claim 13, Paff in view of Morota in view of Rosenberg discloses a paint station which can control zoom and focus (Figure 16). Heidmann discloses a paint station which can adjust attributes including red, green and blue (e.g. color) paint (Figure 2, Item 258). However, Paff in view of Morota in view of Rosenberg in view of Heidmann does not disclose a paint station which controls shutter and iris values. Official Notice is taken that it is notoriously well known in the art to allow control of shutter and iris values to properly control the exposure value of the camera. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include shutter and iris control in the paint station of Paff in view of Morota in view of Rosenberg in view of Heidmann to properly control the exposure value of the master and slave cameras.

[claim 14]

Regarding claim 14, Paff discloses a station which can adjust the attribute on more than one of the cameras simultaneously (c. 7, l. 67 - c. 8, l. 15).

[claim 15]

Regarding claim 15, Paff discloses that the camera attribute can be adjusted while the camera telemetry is being automatically controlled by the master broadcaster computer (c. 7, l. 67 - c. 8, l. 15).

[claim 16]

Regarding claim 16, Paff discloses a paint station which is at least one-fifth of the number of cameras (Figure 6; claim 1).

[claims 32 and 33]

Regarding claims 32 and 33, Paff in view of Morota in view of Rosenberg does not disclose a communication medium which is a multi-mode fiber optic cable. Official Notice is taken that the use of multi-mode fiber optic cable is notoriously well known in the art to provide large bandwidth. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use multi-mode fiber optic cable as the communication medium of Paff in view of Morota in view of Rosenberg to obtain a system with a large amount of bandwidth.

[claims 34 and 35]

Regarding claims 35 and 35, Paff does not disclose a communications medium which is a triaxial cable wherein a semiconductor in the triaxial cable is used to modulate camera telemetry information and the captured image. Official Notice is taken that the use of triaxial cables is notoriously well known in the art to provide low loss and good shielding properties. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a triaxial cable and a semiconductor medium within the triaxial cable to modulate the camera telemetry information and the

captured image data to provide a communications medium with low loss and good shielding.

[claim 36]

Regarding claim 36, Paff does not disclose a communications medium which is a wireless RF connection. Official Notice is taken that the use of wireless RF connections is notoriously well known in the art to not require large amounts of cables to be run. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a wireless RF connection to avoid running large amounts of cables.

8. Claims 17-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Morota et al. (US 6,919,921) in further view of Rosenberg et al. (US 6,128,006) in view of Kanade et al. (US 2002/0118286).

[claim 17]

Regarding claim 17, Paff in view of Morota in view of Rosenberg does not disclose a calibration station. Kanade discloses a similar system and further discloses that the cameras must be calibrated for focal length, zoom and geometric position prior to operation (Paragraphs 0032 - 0037). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a calibration station in the system of Paff in view of Morota in view of Rosenberg as taught by Kanade to properly calibrate the system so that the relationship of the cameras to the scene and to

each other are known.

[claims 18-20]

Regarding claims 18-20, see claim 17.

[claim 21]

Regarding claim 21, see Figure 6 and claim 1 of Paff.

[claim 22]

Regarding claim 22, Paff in view of Morota in view of Rosenberg lacks at least one video storage device. Kanade discloses a similar system and further discloses video storage devices coupled to each camera (Figure 2, Items 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include video storage devices to allow storage of the video resulting from the cameras of Paff.

[claim 23]

Regarding claim 23, Paff in view of Morota in view of Rosenberg in view of Kanade lacks a video storage device which his a plurality of digital disc recorders. Official Notice is taken that it is notoriously well known in the art to record video from cameras onto digital video discs to allow easy transportation of the recorded video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the plurality of video storage devices of Paff in view of Morota in view of Rosenberg in view of Kanade digital video disc recorders to allow easy transportation of the recorded video.

[claim 24]

Regarding claim 24, Paff in view of Morota in view of Rosenberg in view of Kanade lacks a video storage device which is a file server. Official Notice is taken that it is notoriously well known in the art to store video on file servers to allow remote access to the video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the video storage devices of Paff in view of Morota in view of Rosenberg in view of Kanade file servers to allow easy remote access to the recorded video.

[claim 25]

Regarding claim 25, Paff in view of Morota in view of Rosenberg lacks a digital router connecting the output of each of the plurality of digital recorders and a first slow motion controller. Kanade discloses including a video playback controller to the plurality of video storage devices through a router (Figure 2; Paragraph 0030). However, Paff in view of Morota in view of Rosenberg in view of Kanade lacks a playback controller which is a slow motion controller. Official Notice is taken that it is notoriously well known to include slow motion controllers to allow the option of viewing the video in slow motion. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a slow motion controller in the system of Paff in view of Morota in view of Rosenberg in view of Kanade to view the recorded video in slow motion.

[claim 26]

Regarding claim 26, Kanade discloses a controller which is capable of selecting a router output form the plurality of recorders (Paragraph 0030).

[claim 27]

Regarding claim 27, Kanade discloses a controller which is capable of controlling each of the plurality of recorders simultaneously (Paragraph 0030).

[claim 28]

Regarding claim 28, Paff in view of Morota in view of Rosenberg in view of Kanade does not specifically disclose a controller which is capable of controlling the forward and backward motion of the output of each of the digital disc recorders. Official Notice is taken that it is notoriously well known in the art to allow both forward and backward motion to be played (e.g. play and rewind) to allow the user to view the video from a certain time period. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the controller capable of both forward and backward motion playback.

9. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Morota et al. (US 6,919,921) in further view of Rosenberg et al. (US 6,128,006) in view of Kanade et al. (US 2002/0118286) in view of Jain (US 5,729,471).

[claim 29 and 30]

Paff in view of Morota in view of Rosenberg in view of Kanade lacks an additional disc recorder connected to the output of the digital router. Jain discloses that

video produced from a plurality of cameras can be distributed to viewers as a television program and that the multiple viewpoints allows a viewer to "get into" the video scene (c. 12, l. 33 - c. 14, l. 37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce video as taught by Jain using the system of Paff in view of Morota in view of Rosenberg in view of Kanade and distribute the produced video as a television program to viewers allowing the viewers to "get into" the scene as taught by Jain. Official Notice is taken that it is notoriously well known in the art for television viewers to record broadcasted signals in digital disc recorders including slow motion controllers for later replay and viewing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a digital disc recorder for each of the television viewers which records the video produced by Paff in view of Morota in view of Rosenberg in view of Kanade in view of Jain to allow for later replay or viewing.

10. Claims 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Morota et al. (US 6,919,921) in further view of Rosenberg et al. (US 6,128,006) in view of Anderson (US 5,714,997).

[claim 38]

Regarding claim 38, Paff in view of Morota in view of Rosenberg lacks a plurality of microphones and a microphone computer for combining the outputs of the plurality of microphones. Anderson discloses a system which generates sound from a plurality of microphones into a single audio stream to allow a user to experience the audio from a

certain viewpoint at a live event (Figure 17A; c. 2, ll. 35-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of microphones and a microphone computer as claimed in order to allow a user to experience the audio form a certain viewpoint in the scene which the camera system of Paff in view of Morota in view of Rosenberg is viewing.

[claim 39]

Regarding claim 39, Anderson discloses the use of directional microphones (c. 21, ll. 48-57).

[claim 40]

Regarding claim 40, Anderson discloses microphones which are spaced around a target object which is being recorded (c. 21, ll. 48-57).

[claim 41]

Regarding claim 41, Anderson discloses a computer which overlays the output from each of the microphones in the same moment of time (c. 26, ll. 23-39). The examiner notes that the computer of Anderson is capable of doing such an operation "based on the speed of sound and the distance from each of the microphones to a target object" as claimed.

[claim 42]

Regarding claim 42, Anderson discloses a computer which is capable of using the a calculated speed of sound including an adjustment for the altitude of the microphones and the relative humidity at the site as claimed.

[claim 43]

Regarding claim 43, Anderson discloses a output of each of the microphones being connected to a digital mixer which is controlled by the microphone computer (Figure 17A).

11. Claims 44, 46-48, 50, 51, 55, 56 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Jain (US 5,729,471).

[claim 44]

Regarding claim 44, Paff discloses a multiple camera video method, comprising the steps of: using a master pan head to position a master camera (Figure 6, Items 13-16, MASTER CAMERA 100); calculating telemetry settings for a plurality of slave cameras (Figure 6, SLAVE CAMERAS SD1 - SD6) based on the master camera telemetry and a geometric transform in a computer remote from the plurality of slave cameras (c. 4, ll. 6-49); and communicating telemetry settings to the plurality of slave cameras (c. 4, ll. 6-49). Paff further discloses a master pan head which positions the master camera from a remote location (Figure 6). However, Paff does not disclose storing a video feed from the master camera and the plurality of slave cameras in a storage device and producing a replay video feed based on the stored video feed from the master camera and the plurality of slave cameras, wherein the replay video feed is recorded to a digital disc recorder.

Jain teaches taking stored video from a number of cameras and creating a video feed from the stored video feed (i.e. a replay video; Figure 1, Items 11a-11n and 13; c. 12, l. 33 - c. 14, l. 37) to allow a user to "get into" the video scene. Therefore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made to create replay video feeds as taught by Jain to allow the user to "get into" the video scene. However, Paff in view of Jain does not disclose storing the replay video feed in a digital disc recorder. The examiner notes that the systems of Jain is directed to producing video to be broadcast over, for example, network television. Official Notice is taken that it is notoriously well known in the art for television viewers to record broadcasted signals in digital disc recorders for later replay and viewing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a digital disc recorder for each of the television viewers which records the video produced by Paff in view of Jain to allow for later replay or viewing.

[claim 46]

Regarding claim 46, Paff lacks and master pan head and master camera which communicate via an Ethernet connection. Official Notice is taken that it is notoriously well known in the art to communicate with pan heads and cameras using Ethernet connections to allow for communication with the camera over a high-speed internet connection. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an Ethernet connection to communicate with the master pan head and master camera via a high-speed internet connection.

[claim 47]

Regarding claim 47, Paff lacks a master pan head including a monitor mounted thereon. Official Notice is taken that it is notoriously well known in the art to include electronic viewfinders or monitors on cameras to allow a local camera operator to verify

the image which is being captured by the camera. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a monitor mounted on the master pan head to allow the option of operating the camera locally while being able to verify the image which is being captured by the camera.

[claim 48]

Regarding claim 48, Paff discloses a plurality of robotic pan heads upon which each of the plurality of cameras is mounted for remotely controlling said plurality of cameras (Figure 6; c. 3, ll. 58-62).

[claim 50]

Regarding claim 50, while Jain discloses a plurality of storage devices (Figure 1, Items 11a-11n), Jain does not specifically disclose the that storage devices are digital disc recorders. Official Notice is taken that the use of digital disc recorders to store video data is notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use digital disc recorders as the storage devices of Jain to easily store data on industry standard disc formats.

[claim 51]

Regarding claim 51, Jain further discloses that video may be taken from a video database (i.e. a file server; Figure 1; c. 17, l. 47-55).

[claim 55]

Regarding claim 55, Paff in view of Jain discloses creating a replay video, but does not disclose the use of a slow motion controller and moving forward or backward

through the video. Official Notice is taken that it is notoriously well known in the art to allow both forward and backward slow motion video to be played (e.g. play and rewind) to allow the user to view the video from a certain time period and to review action in the video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a slow motion controller capable of both forward and backward motion playback to allow a user to review the video.

[claim 56]

Regarding claim 56, Jain discloses allowing a user to select a viewpoint to "get into" the video, therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the selection of a second viewpoint (i.e. second source) of video to review in slow motion.

[claim 58]

Regarding claim 58, see claim 44 and note that broadcast television is distributed to multiple individuals (i.e. multiple disc recorders).

[claim 79]

Regarding claim 79, Paff discloses a multiple camera video system comprising: a plurality of cameras (Figure 6, MASTER CAMERA 100 and SLAVE CAMERAS SD1-SD5); a master pan head for positioning a selected master camera from the plurality of cameras (Figure 6, Items 13-16); and a master broadcaster computer for calculating telemetry for at least one slave camera from the plurality of cameras (c. 4, ll. 6-49). Paff further discloses tilt adjustment (Figure 2, Item 11B and 14). However, Paff does not

disclose a plurality of disc recorders, a digital router connecting the output of the plurality of disc recorders and a first slow motion controller.

Jain discloses that video created from a plurality of cameras and stored in a plurality of recorders can be constructed into a new video scene which is broadcast to viewers and allows the viewers to "get into" the video scene (Figure 1; c. 12, l. 33 - c. 14, l. 37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of recorders as taught by Jain in the system of Paff to allow viewers to get into the scene. The examiner notes that in the system of Jain, environment model 13 can be considered a "digital router" as claimed. However, Jain does not specifically disclose a first slow motion controller or an additional disc recorder as claimed. Official Notice is taken that it is notoriously well known in the art for television viewers to record broadcasted signals in digital disc recorders including slow motion controllers for later replay and viewing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a digital disc recorder for each of the television viewers which records the video produced by Paff in view of Jain to allow for later replay or viewing. However Jain does not specifically disclose storage devices which are digital disc recorders. Official Notice is taken that the use of digital disc recorders to store video data is notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use digital disc recorders as the storage devices of Jain to easily store data on industry standard disc formats.

12. Claims 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff (US 5,164,827) in view of Jain (US 5,729,471) in view of Anderson (US 5,714,997).

[claim 52]

Regarding claim 52, Paff in view of Jain does not disclose capturing sound from a plurality of locations. Anderson discloses a system which generates sound from a plurality of microphones into a single audio stream to allow a user to experience the audio from a certain viewpoint at a live event (Figure 17A; c. 2, ll. 35-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of microphones and a microphone computer as claimed in order to allow a user to experience the audio form a certain viewpoint in the scene which the camera system of Paff in view Jain is viewing. Anderson further discloses a computer which overlays the output from each of the microphones in the same moment of time (c. 26, ll. 23-39). The examiner notes that the computer of Anderson is capable of doing such an operation "based on the speed of sound and the distance from each of the microphones to a target object" as claimed.

[claim 53]

Anderson discloses a computer which is capable of using the a calculated speed of sound including an adjustment for the altitude of the microphones and the relative humidity at the site as claimed.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJH
7/9/2006

LIN YE
PRIMARY EXAMINER